AMENDED CLAIM SET:

1. - 15. (cancelled).

16. (new) Spherical particles for thermal spraying, consisting essentially of a yttrium or lanthanide-containing compound and having a breaking strength of at least 10 MPa and an average particle diameter of 15 to 80 μm.

17. (new) The spherical particles of claim 16, wherein said spherical particles are obtained by granulating yttrium or lanthanide-containing compound fines having a Fisher diameter of up to 0.6 μm into granules and firing said granules.

18. (new) The spherical particles of claim 17, wherein said granules are fired at a temperature of 1500 to 1800°C.

19. (new) The spherical particles of claim 16, having an average particle diameter of 15 to 60 μm.

20. (new) The spherical particles of claim 16 wherein said yttrium or lanthanide-containing compound is a yttrium or lanthanide oxide or yttrium or lanthanide compound oxide.

21. (new) The spherical particles of claim 16, wherein said yttrium or lanthanide-containing compound is at least one selected from the group consisting of yttrium oxide and ytterbium oxide.

22. (new) A thermal sprayed component comprising a substrate having a surface and a coating of the yttrium or lanthanide-containing compound particles of claim 16 thermally sprayed to the substrate surface.

23. (new) Spherical particles for thermal spraying, consisting essentially of a yttrium or lanthanide-containing compound and having a bulk density of at least 1.0 g/cm^3, an aspect ratio of up to 2, and a cumulative volume of pores with a radius of up to 1 μm which is less than 0.5 cm^3/g.

24. (new) The spherical particles of claim 23, wherein said spherical particles are obtained by granulating yttrium or lanthanide-containing compound having an average particle diameter of 0.01 to 5 μm and firing said granules.

25. (new) The spherical particles of claim 24, wherein said granules are fired at a temperature of 1200 to 1800°C.

26. (new) The spherical particles of claim 23 having a particle size distribution in which a particle diameter D90, D50 and D10 corresponds to 90 vol%, 50 vol% and 10 vol% accumulation, respectively, wherein D90 is up to 50 μm and the ratio of D50 to a Fisher diameter is up to 5.

27. (new) The spherical particles of claim 26 wherein D10 is at least 10 μm, and the particles have a dispersion index of up to 0.6.

28. (new) The spherical particles of claim 23 wherein said yttrium or lanthanide-containing compound is a yttrium or lanthanide oxide or yttrium or lanthanide compound oxide.

29. (new) The spherical particles of claim 23, wherein said yttrium or lanthanide-containing compound is at least one selected from the group consisting of yttrium oxide and ytterbium oxide.

30. (new) A thermal sprayed component comprising a substrate having a surface and a coating of the yttrium or lanthanide-containing compound particles of claim 23 thermally sprayed to the substrate surface.